Supplementary Material

Identification of polymorphisms in TYRP1, DCT and RAB38 genes and their association with coat color in alpacas

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**Supplementary Materials**- Table 2S. Primers were used to amplify the coding region of *TYRP1*, *DCT* and *RAB38* genes, 5' and 3’ regions.

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| **Amplicon** | **Primer** | **Location** |
| AMPL2094061 TYRP1 | Fw: GGACATTTAAAACAATGACCTTGAGAAGTTRv: CACGGTTCTTCAACAGGACATG | 6744623,67446536744966,6744988 |
| AMPL2094063 TYRP1 | Fw: AAAAGCAGGGTCAAGAAGGTGTRv: CTTTCCAGCTTGATTTTCACGTGT | 6745210,67452326745326,6745350 |
| AMPL2094064 TYRP1 | Fw: CTGGAGAATACGTCCAGTGCTTRv: GCTTTGGTGAAGTGGATTTCTCTCA | 6743188,67432106743534,6743559 |
| AMPL2094066 TYRP1 | Fw: TCAGATTTCCTAGGGAAACATTTTCTGTGRv: TAAGTTCCAAATGACATCGAGAATTCTGAA | 6740391,67404206740728,6740758 |
| AMPL2094069 TYRP1 | Fw: AGTTTAAGTGTGTCACATGCTTAGCTRv: TGGGAAAAATTGTTTCCCAATATCATCAC | 6734181,67342076734526,6734555 |
| AMPL2094070 TYRP1 | Fw: GGCTAAGCTGAAAACTACTAGAAATGTGARv: GTGAGTATTGAAAGTGGATTTTTACGGTG | 6729091,67291206729404,6729433 |
| AMPL2094072 TYRP1 | Fw: GCCTACTTACGTATTTGAATCAGGGARv: GTGGCATATTCTCCTCTGCATTAGT | 6727063,67270896727404,6727429 |
| AMPL2094062 TYRP1 | Fw: TCCACAGTTGTATCCTGAGAAATTGCRv: GAATGGAAGCCTGGAAACTCCT | 6744930,67449566745242,6745264 |
| AMPL2094065 TYRP1 | Fw: TACCTGTGCCACGTGAGAAATGRv: TGCTTAACGATTATTTAGGCTCATTCTCT | 6743502,67435246743845,6743874 |
| AMPL2094067 TYRP1 | Fw: CTTTGGGCAACACATTTAGTCTCTTTACRv: CTGGAGAGAACTAACAGAGACAGACT | 6740690,67407186741038,6741064 |
| AMPL2094068 TYRP1 | Fw: GGATTGAACCCAGTCTGGGTTTRv: TGTCTTTCAGTGTTCATGTTATGTAGACAA | 6736598,67366206736914,6736944 |
| AMPL2094071 TYRP1 | Fw: TGGCTATAAGGGTAACACATTTGCTTRv: GGGCTGCTGTAGTGAAACTTTTT | 6729368,67293946729718,6729741 |
| AMPL2094073 TYRP1 | Fw: GTAAGTCAATCAGTTATTTTTCAGCCATGTRv: TACATTTAGGGTGTCCAATTGTGGTT | 6727364,67273946727691,6727717 |
| AMPL2094166 DCT | Fw: CTCGAGAGTGGAAGCCAAGGAGARv: GAACTTCCTTGGCCACTGTTCT | 1921241,19212641921566,1921588 |
| AMPL2094168 DCT | Fw: GCAGCATGGACTCCATTTCGTARv: GAAGGGTCAAGGAGTGGACATTC | 1929731,19297531930065,1930088 |
| AMPL2094170 DCT | Fw: CATTGCTTTCAGAGAGAGAAATGACAARv: AGGGCATGCCTGGTCATTTAAT | 1932350,19323771932700,1932722 |
| AMPL2094172 DCT | Fw: CCATGATTATGACTTTAATTGGTTTGCTGARv: GCTTTCCTTCCAGTTCGTCACA | 1934852,19348821935172,1935194 |
| AMPL2094175 DCT | Fw: CCCATTTCATTTTTGAGAAAGCTCCARv: GGTCTTGGTTTCCACTAAAAAGAAAGAAAA | 1943740,19437661944083,1944113 |
| AMPL2094167 DCT | Fw: GGTCCTTACGTCCTGCGAAARv: CAATCCTATCTAACCAGCTCAAGAATCC | 1921535,19215551921682,1921710 |
| AMPL2094169 DCT | Fw: GTGCGAGCAGAAGAAACCACTGRv: GAACTTGCCTGAAAGTACTTCCCA | 1930033,19300551930342,1930366 |
| AMPL2094171 DCT | Fw: GCTATATGTTTGGTGCAGACCCATARv: CCAACATGCATGAGGAACAGGA | 1932631,19326561932977,1932999 |
| AMPL2094174 DCT | Fw: CCTACAACAGAGCTTCCCACTTRv: ACATCCATGGTTCACACAGAGAATAAA | 1936522,19365441936869,1936896 |
| AMPL2094176 DCT | Fw: TACATGTGGAAGGCAAACTGGTRv: CAAAGCTCTCCAACTAAAGGAAGAAC | 1946469,19464911946817,1946843 |
| AMPL2093869 RAB38 | Fw: TCGCCCTCCTGGAGTCTCTRv: GTGCGAGGAGAAGTTCTGGT | 16449624,1644964316449883,16449903 |
| AMPL2093870 RAB38 | Fw: GGGCAAGACCAGCATCATCAARv: GTCTCCCACTTGGCCTGTAAG | 16449852,1644987316450063,16450084 |
| AMPL2093871 RAB38 | Fw: ATATGTGGCTAGTGGGATACTGTATTAACRv: TGTCACTGCTTCAAATGTGGCT | 16471961,1647199116472313,16472335 |
| AMPL2093872 RAB38 | Fw: GGGTGCCTTCATTGTCTTCGATRv: GGAACTGTAAGTCACTAAACGAACACATAT | 16472281,1647230316472599,16472629 |
| AMPL2093878 RAB38 | Fw: GTGGCAGACGGCAATTATGAACRv: GGGAGAACAGTTTCGTTAGTCAACA | 16505339,1650536116505686,16505711 |
| AMPL2093879 RAB38 | Fw: TCTCATATAGGTGTCTGCTACAGCARv: GCTTGCTATTTCTCTTATAGGAAAGGTACA | 16505651,1650567616505994,16506024 |